

Wednesday, 9/12/2007 12:17:03 PM

User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : SADDLE BILLET
Job Number : 34644	
Estimate Number : 10033	
P.O. Number : <i>N/A</i>	Part Number : D6101003
This Issue : 9/12/2007 S.O. No. : <i>N/A</i>	Drawing Number : D6101 REV A
Prsht Rev. : NC	Project Number : N/A
First Issue : <i>N/A</i> Type : MACHINED PARTS	Drawing Revision : A
Previous Run : 34106	Material : <i>N/A</i>
Written By : <i>[Signature]</i>	Due Date : 9/30/2007 Qty.: 100 Um: Each
Checked & Approved By : <i>[Signature]</i>	
Comment : Est. A: 01.05.04 New Issue EC	

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 PG PURCHASING



Comment: PURCHASING

Issue P/O: *4583*

a) Description: Alluminum billet

b) 7.875" x 6.250" x 2.00" thick

c) Tolerance on all dimensions are +0.030"/-0.000"

d) Grain direction along 7.875" length

e) Material: 7075-T7351 (QQ-A-250/12)

f) Material certification required

U 5709.13 100

2.0 D6101003P 7075-T7351 2X6.25X7.875



Comment: Qty.: 1.0000 Each(s)/Unit Total : 100.0000 Each(s)

7075-T7351 2X6.25X7.875

3.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material certification is attached

*[Signature] 07/10/02 100**[Signature] 07/10/02 100*

4.0 QC6 DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

Ensure Material certification comply to Dwg D6101

*[Signature] 07.10.04**100*

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: DD Date: 02/10/09
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 9/12/2007 12:17:03 PM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE BILLET

Job Number: 34644

Part Number: D6101003

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

Smile see Seq 3 ✓

6.0

QC21

FINAL INSPECTION/W/O RELEASE



(100)

Comment: FINAL INSPECTION/W/O RELEASE

PD 07/10/04

Job Completion



u 07-10-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

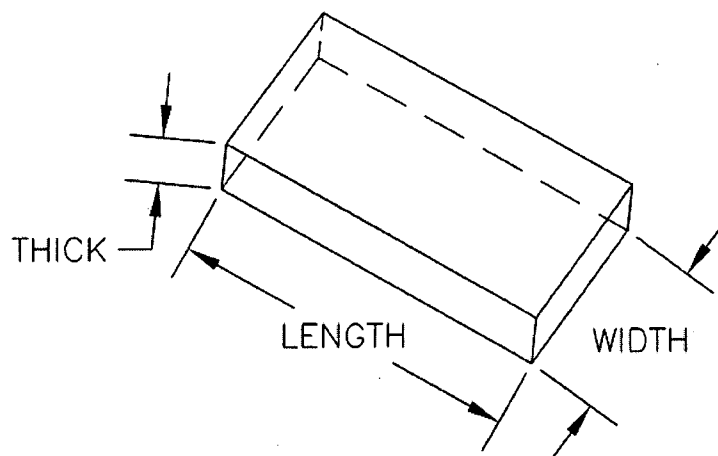
NOTE: Date & initial all entries



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>A</i>	APPROVED <i>AS</i>	DRAWING NO. D6101	Rev. A SHEET 1 OF 1
DATE 01.03.30		TITLE SADDLE BILLET, 7075	SCALE NTS
A	01.03.30	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
01.04.23 *CP*



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length

NO. 34644
WORK ORDER
WITHOUT NOTICE
SUBJECT TO AMENDMENT
INCONTROLLED COPY
ENGINEERING
RETURN TO
COPY

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THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

A.ORD. NO.		NO. TRANS.		DE FROM		DATE CHARGED-LOADED		NO. COM.	
IV#31-		410134		01		EXPÉDIÉ 28 SEP 2002			
CERTIFICATION						A.M. CASTLE & Co. (Canada) Inc.			
Métaux Castle®									
NO. COM. CLIENT-CUST. ORD. NO.						COMPTÉ-ACCT.		VEND. SLS	
4583						91031		TERR.	
EXPÉDIÉ PAR-SHIP VIA						MANITOULIN			
REGION LIVRAISON-DEL. ZONE						F.A.B.-F.O.B.			
PURCHASING AGENT						TELEPHONE		H/C	
A. LACELLE						613 632-3336		9 0	
IP TO:						VENDU A-SOLD TO:		C/C	
DART AEROSPACE LTD						1270 ABERDEEN		ON K6A 1K7	
HAWKESBURY						INSTRUCTIONS LIVRAISON (CONT.)-DELIVERY (CONT'D.)			
INSTRUCTIONS LIVRAISON (CONT.)-DELIVERY (CONT'D.)						PREPAID		INFORMATION CRÉDIT-CREDIT INFORMATION	
REC SEE FRANCE REF								ROUTE	
								01-NL-09/21	
								31-NL-09/26	
IONS/LIVRAISON-DELIVERY						QTE/UNITE COM.-ORDERED		POIDS COM.-WT. ORDERED	
-658548						100 PCS PCS		995	
TON - ITEM 1						BALLOTS-BUNDLES		POIDS EXP.-WT. SHIPPED	
000 PLATE 7075-T7351 ALUM 6.25" X 7.875"						1 100		995	
BLACK W/RED STRIPE						COULÉE INFO-HEAT INFO		QTE-QTY	
INSTRUCTIONS						369178A9		70	
TOL: +.030"/- .000"						403411 AS		29.08850F	
THICKNESS TOL: +.030"/- .000"						INSTRUCTIONS (CONT'D.)		FORME-SHAPE	
GRAIN TO RUN ALONG 7.875"						100x6.25"x7.875"		I.A.C.	
PRIOR DIST/ORD: 01 410134								6857	
CERTIFICATE OF CONFORMANCE						ENT-WHSE.		4	
A.M. Castle & Co. (Canada) Inc.									
SIGHT FOR SHIPPING PURPOSES ONLY. SEE VOICES FOR ACCURATE BILLING WEIGHT. PLEASE SIGN AND DATE DRIVER'S COPY FOR RECEIPT OF MATERIAL AND, IF CHECKED, TEST REPORTS.						QTE/UNITE COM.-ORDERED		POIDS COM.-WT. ORDERED	
PTION - ITEM 2						BALLOTS-BUNDLES		POIDS EXP.-WT. SHIPPED	
TERMS AND CONDITIONS OF SALE									
SEE DISCLAIMERS AND LIMITATIONS ON THE REVERSE SIDE						FORME-SHAPE		I.A.C.	
INSTRUCTIONS						INSTRUCTIONS (CONT'D.)		ENT-WHSE.	
1 Box									
RIPTION - ITEM 3						QTE/UNITE COM.-ORDERED		POIDS COM.-WT. ORDERED	
						BALLOTS-BUNDLES		POIDS EXP.-WT. SHIPPED	
COULÉE INFO-HEAT INFO						QTE-QTY		FORME-SHAPE	
INSTRUCTIONS								I.A.C.	
INSTRUCTIONS (CONT'D.)								ENT-WHSE.	
ALL EXCEPTIONS FOR SHORTAGE OR DAMAGE MUST BE NOTED IN THE DRIVER COPY & CUSTOMER COPY OF THE DELIVERY RECEIPTS & SIGNED BY THE DRIVER & CUSTOMER. COPY OF SUCH RECEIPT PROPERLY NOTED MUST BE SUBMITTED WITHIN 30 DAYS WHEN CREDIT IS REQUESTED.									
ENT-WHSE.									

SHIP TO:

A M CASTLE & CO
3050 SOUTH HYDRAULIC
WICHITA, KS 67216

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215

Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number

4099318

SOLD TO:

AM CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

CUSTOMER PO NUMBER: 23-84414		WORK PACKAGE:		CUSTOMER PART NUMBER: 6857 A97075-60		SHIP RUN/LOAD ID: 100991/13	GOV'T CONTRACT NUMBER:
KAISER ORDER NO: 1049381	LINE ITEM: 1	SHIP DATE: 7-JUN-2007	ALLOY: 7075	CLAD: BARE	TEMPER: T7351	PRODUCT DESCRIPTION: MILL FINISH PLATE	
WEIGHT SHIPPED: 7194 LB	QUANTITY: 5 PCS EST.	B/L NUMBER: 2013158		GAUGE: 2.0000 IN	WIDTH: 48.500 IN	LENGTH: 144.500 IN	

Certified Specifications

AMS 4078/RevF
ASTM B 209/Rev06
BSS 7055/RevA
DPS 4.713/RevN/AmdAF
GSS16100/RevG

AMS-QQ-A-250/12
ASTM B 594/Rev06
CMMP 025/RevR
EAC MS1011/RevD
MMS 159/RevN

AMS-STD-2154
BAC 5439/RevH
CSTI 006/RevC
GAMPS 9101/RevB
PS 21211/RevK

Test Code: 4297

Test Results

Lot: 369178A9 Cast 976 Drop 49 Ingot 4

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	73.4 : 73.5 (506 : 507)	62.5 : 62.6 (431 : 432)	11.3 : 11.3

Conductivity, % IACS :	41.4 Min	41.6 Max
(MS/M) :	24.0 Min	24.1 Max

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.11	0.23	1.49	0.02	2.40	0.19	5.60	0.03	0.01	0.01	TOT 0.04

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4099318

Lot: 404718A9 Cast 976 Drop 70 Ingot 2

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	72.8 : 72.9 (502 : 503)	61.1 : 61.5 (421 : 424)	11.3 : 11.3
		Conductivity %IACS :	41.3 Min	41.6 Max	
		(MS/M) :	24.0 Min	24.1 Max	

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.10	0.20	1.46	0.01	2.47	0.20	5.57	0.02	0.01	0.00	TOT 0.04

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.20	0.00	2.10	0.18	5.10	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.00	0.30	2.90	0.28	6.10	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

TEST NOTES

Metal represented by this test report was immersion
ultrasonically tested from one side and meets the Class A
and Class B requirements of all specifications referenced
on this test report.

CERTIFICATION

KAISER ALUMINUM & CHEMICAL CORPORATION (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED AND MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF KAISER ALUMINUM & CHEMICAL CORPORATION LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. 180-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR



Page 2 of 2

T-930 P008/019 F-087

316-522-2453

06-12-'07 05:27 FROM-Castle Metals

SHIP TO:
A M CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

SOLD TO:
AM CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

**KAISER
ALUMINUM**

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4099554

CUSTOMER PO NUMBER: 01-84412		WORK PACKAGE:		CUSTOMER PART NUMBER: 6857 A97075-80		SHIP RUN/LOAD ID: 100982/24		GOV'T CONTRACT NUMBER:	
KAISER ORDER NO: 1049378	LINE ITEM: 1	SHIP DATE: 8-JUN-2007	ALLOY: 7075	CLAD: BARE	TEMPER: T7351	PRODUCT DESCRIPTION: MILL FINISH PLATE			
WEIGHT SHIPPED: 4300 LB	QUANTITY: 3 PCS EST.	B/L NUMBER: 2013189	GAUGE: 2.0000 IN		WIDTH: 48.500 IN	LENGTH: 144.500 IN			

Certified Specifications

AMS 4078/RevG
ASTM B 209/Rev06
BSS 7055/RevA
DPS 4.713/RevN/AmdAF
GSS16100/RevG

AMS-QQ-A-250/12
ASTM B 594/Rev06
CMMP 025/RevR
EAC MS1011/RevD
MMS 159/RevN

AMS-STD-2154
BAC 5439/RevH
CSTI 006/RevC
GAMPS 9101/RevB
PS 21211/RevK

Test Code: 4297

Test Results

Lot: 403711A5 Cast 978

Drop 81

Ingot 3

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)				Yield KSI (MPA)		Elongation %		
	T7351	LT / 2 (Min:Max)	73.7 : 73.8				62.3 : 62.8		11.5 : 11.6		
			(608 : 509)				(430 : 433)				
		Conductivity %IACS :	42.0 Min				42.5 Max				
		(MS/M) :	24.4 Min				24.7 Max				
Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.10	0.11	1.5	0.01	2.5	0.19	5.7	0.01	0.01	0.00	TOT 0.03

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

CASTLE METALS CORP.

DATE RCVD 6/11/07
IAC 6857
APPROVED BY fw-2